

Title (en)

PROCESS FOR RECYCLING ALUMINIUM-BEARING COMPOSITE MATERIALS

Title (de)

VERFAHREN ZUR WIEDERVERWERTUNG VON ALUMINIUMHALTIGEN VERBUNDWERKSTOFFEN

Title (fr)

PROCÉDÉ DE RECYCLAGE DE MATÉRIAUX COMPOSITES COMPRENANT L'ALUMINIUM

Publication

EP 1979497 A2 20081015 (EN)

Application

EP 07701595 A 20070109

Priority

BR 2007000009 W 20070109

Abstract (en)

[origin: WO2008083449A2] A process for recycling composite materials includes the steps of feeding a quantity of composite material composed of at least one polymer and aluminum into at least one first reactor; heating the composite material in a non-oxidizing environment at a temperature sufficient to volatilize the at least one polymer and form a hydrocarbon by-product and aluminum in the at least one first reactor; feeding the aluminum free of the at least one polymer into a second reactor; and heating the aluminum in a non-oxidizing environment at a temperature sufficient to melt the aluminum in the second reactor.

IPC 8 full level

C22B 7/00 (2006.01); **C10B 47/44** (2006.01); **C22B 9/22** (2006.01); **C22B 21/06** (2006.01); **F23G 5/027** (2006.01); **F23G 5/44** (2006.01);
F23G 7/00 (2006.01); **F27B 9/20** (2006.01); **F27D 3/08** (2006.01); **F27D 13/00** (2006.01)

CPC (source: EP KR)

B29B 17/00 (2013.01 - KR); **C08J 11/00** (2013.01 - KR); **C10B 47/44** (2013.01 - EP); **C22B 7/001** (2013.01 - EP); **C22B 7/004** (2013.01 - EP);
C22B 9/02 (2013.01 - KR); **C22B 9/226** (2013.01 - EP); **C22B 21/00** (2013.01 - KR); **C22B 21/0069** (2013.01 - EP); **C22B 21/0092** (2013.01 - EP);
F23G 5/027 (2013.01 - EP); **F23G 5/444** (2013.01 - EP); **F23G 7/003** (2013.01 - EP); **C21D 3/02** (2013.01 - EP); **F23G 2201/301** (2013.01 - EP);
F23G 2202/20 (2013.01 - EP); **F23G 2203/8013** (2013.01 - EP); **F23G 2204/201** (2013.01 - EP); **F23G 2205/121** (2013.01 - EP);
Y02P 10/20 (2015.11 - EP)

Cited by

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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

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AU 2007260796 B2 20100902; BR PI0706854 A2 20110412; CA 2612598 A1 20080709; CA 2612598 C 20111101; CN 101484595 A 20090715;
CN 101484595 B 20120711; EP 1979497 A2 20081015; EP 1979497 A4 20101117; EP 1979497 B1 20120307; ES 2383208 T3 20120619;
JP 2009535204 A 20091001; JP 5053366 B2 20121017; KR 101085930 B1 20111122; KR 20090031341 A 20090325;
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DOCDB simple family (application)

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CN 200780000720 A 20070109; EP 07701595 A 20070109; ES 07701595 T 20070109; JP 2009508061 A 20070109;
KR 20087000507 A 20070109; MX 2008000015 A 20070109